Exhibit 7

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UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA, MISSOULA DIVISION

MONTANA MEDICAL ASSOCIATION, ET. AL.,

Plaintiffs,

and

MONTANA NURSES ASSOCIATION,

Plaintiff-Intervenors,

v.

AUSTIN KNUDSEN, ET AL.,

DEFENDANTS.

No. CV-21-108-M-DWM

EXPERT REPORT OF RAM DURISETI MD, PHD

Expert Report of Ram Duriseti MD, PhD

July 15th, 2022

I, Ram Duriseti, MD, PhD, declare as follows:

I am a clinical associate professor at the Stanford Emergency Department. I have been a practicing Board Certified Emergency Physician for over 20 years. My PhD background is in computational decision modeling, simulation, and optimization algorithms. I have personal knowledge of the facts set forth below and could testify competently to them if called to do so. A true and correct copy of my *curriculum vitae* is attached to this declaration.

I am being compensated $300.00 per hour for my effort in this case. My compensation is in no way contingent upon my conclusions in this case.

COVID-19 is the disease caused by infection with the SARS-CoV-2 virus. The current generation of COVID-19 vaccines do not significantly limit transmission. Transmission of an infectious disease is both a function of behavior and presence of infection. A vaccine mandate with

the purpose of limiting transmission must not simply decrease the risk of infection, but must do so by a substantial margin.

We must first acknowledge, using the Pfizer COVID-19 mRNA vaccine as a canonical example, that the vaccine trials were never designed to test for preventing transmission. Pfizer themselves pointed this out to the FDA.[1] The "data gaps" identified by Pfizer were:

- Duration of protection
- Effectiveness in certain populations at high risk of severe COVID-19
- Effectiveness in individuals previously infected with SARS-CoV-2
- Future vaccine effectiveness as influenced by characteristics of the pandemic, changes in the virus, and/or potential effects of co-infections
- Vaccine effectiveness against asymptomatic infection
- Vaccine effectiveness against long-term effects of COVID-19 disease

[1] https://www.fda.gov/media/148542/download#page=38

- Vaccine effectiveness against mortality
- Vaccine effectiveness against transmission of SARS-CoV-2

It's important to remember that the original Pfizer trial supporting its FDA approval was never structured to test for transmission reduction and this is part of the record in the Emergency Use Authorization (EUA) review. As noted by Dr. Patrick Moore of the University of Pittsburgh Cancer Institute,

> "One question that addresses these two discussion items, I find is really, really central, and important, is that FDA did not ask in its guidance and Pfizer has presented no evidence in its data today that the vaccine has any effect on virus carriage or shedding, which is the fundamental basis for herd immunity (page 342 of transcription)." [2]

While many COVID-19 immune naïve individuals (no prior infection by SARS-CoV-2 which is the virus that causes COVID-19) likely benefitted from having their immune systems primed by a vaccine prior to a subsequent infection thereby increasing their protection from more severe disease progression, any imputed impact on disease transmission has been fleeting at best.

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[2] https://www.fda.gov/media/144859/download

As early as Summer 2021, emerging data suggested that vaccinated individuals' net reduction in "viral load" during an infection was no more than 30%.[3] Since that time, between waning efficacy and partial "immune escape" from SARS-CoV-2 variants, it's become clear that even that degree of reduction is not sustained. In a more recent study, researchers used longitudinal sampling of nasal swabs for determination of viral load, sequencing, and viral culture in outpatients with newly diagnosed coronavirus disease 2019 (Covid-19). From July 2021 through January 2022 and concluded that, "we did not find large differences in the median duration of viral shedding among participants who were unvaccinated, those who were vaccinated but not boosted, and those who were vaccinated and boosted".[4]

When discussing the topic of transmission in a health care setting and staff vaccination rates, a July 2021 paper examined infection rates among different vaccinated patient cohorts in a nursing home at different levels of staff vaccination. The most telling table was in the supplement.

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[3] https://www.medrxiv.org/content/10.1101/2021.08.20.21262158v1.full-text

[4] https://www.nejm.org/doi/full/10.1056/NEJMc2202092

In table S3, there was no association between staff vaccination rates and transmission to residents regardless of the residents' vaccination status.[5] As this study was pre-Delta and pre-Omicron, given increased escape from vaccine induced immunity with both Delta and Omicron variants, there is no reason to believe that this trend would not hold.

NURSING HOME VACCINATIONS 8

Table S3. Incident SARS-CoV-2 infections in residents living in nursing homes with low, moderate, and high staff vaccination rates

	Low staff vaccination (Less than 58.7% of staff vaccinated)		Moderate staff vaccination (58.7 - 69.2% of staff vaccinated)		High staff vaccination (69.3 - 95.7% of staff vaccinated)	
	Total	Percent (%) asymptomatic	Total	Percent (%) asymptomatic	Total	Percent (%) asymptomatic
Residents vaccinated with at least dose 1, n	5691		6291		6260	
Tested positive 0-14 days after dose 1, n(%)	266 (4.7%)	71.1%	267 (4.2%)	74.2%	289 (4.6%)	69.2%
Tested positive 15-28 days after dose 1, n(%)	83 (1.5%)	75.9%	50 (0.8%)	62.0%	117 (1.9%)	72.6%
Residents vaccinated with doses 1 & 2, n	4001		4579		4468	
Tested positive 0-14 days after dose 2, n(%)	46 (1.1%)	80.4%	32 (0.7%)	87.5%	52 (1.2%)	86.5%
Tested positive >14 days after dose 2, n(%)	18 (0.4%)	72.2%	8 (0.2%)	75.0%	12 (0.3%)	83.3%
Unvaccinated residents	1629		1296		1065	
Tested positive 0-14 days after clinic 1 held, n(%)	73 (4.5%)	65.8%	65 (5.0%)	66.2%	35 (3.3%)	68.6%
Tested positive 15-28 days after clinic 1 held, n(%)	31 (1.9%)	64.5%	15 (1.2%)	46.7%	23 (2.2%)	65.2%
Tested positive 29-42 days after clinic 1 held, n(%)	6 (0.4%)	83.3%	4 (0.3%)	75.0%	6 (0.6%)	83.3%
Tested positive >42 days after clinic 1 held, n(%)	6 (0.4%)	83.3%	3 (0.2%)	66.7%	3 (0.3%)	100.0%

Notes. Nursing homes stratified by tertiles of staff vaccination rates as of February 17, 2021. Staff vaccinations occurred simultaneously with resident vaccinations and rates were tracked by the organization.

What about transmission and vaccination/booster status with Omicron? An early December 2021 paper in Danish Households demonstrated a roughly 40% reduction in household secondary attack rate (SAR) with boosting when compared to the unvaccinated or

5 https://www.nejm.org/doi/suppl/10.1056/NEJMc2104849/suppl_file/nejmc2104849_appendix.pdf

vaccinated.[6] Most importantly, there was no such reduction in susceptibility to infection when comparing vaccinated alone compared to the vaccinated. Focusing on table 2, during the early December 2021 study period, booster vaccination cut the risk of contracting Omicron by roughly 45%+ and passing on Omicron by roughly 40%.[5] While this appeared promising for boosters, the subsequent ecological waves from late December 2022 forward in heavily boosted countries previously lauded for the "COVID success" demonstrated otherwise. Denmark, Iceland, Norway, New Zealand, Australia, Hong Kong, South Korea all experienced per-capital COVID waves larger than any experienced by the United States.[7] So the advantage of boosting, while demonstrable in an 8-week time frame, appears to rapidly devolve over time.

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6 https://www.medrxiv.org/content/10.1101/2021.12.27.21268278v1.full.pdf

7 https://ourworldindata.org/explorers/coronavirus-data-explorer?zoomToSelection=true&time=2020-03-01..latest&facet=none&pickerSort=asc&pickerMetric=location&Metric=Confirmed+cases&Interval=7-day+rolling+average&Relative+to+Population=true&Color+by+test+positivity=false&country=USA~ISL~DNK~NOR~KOR~NZL~AU

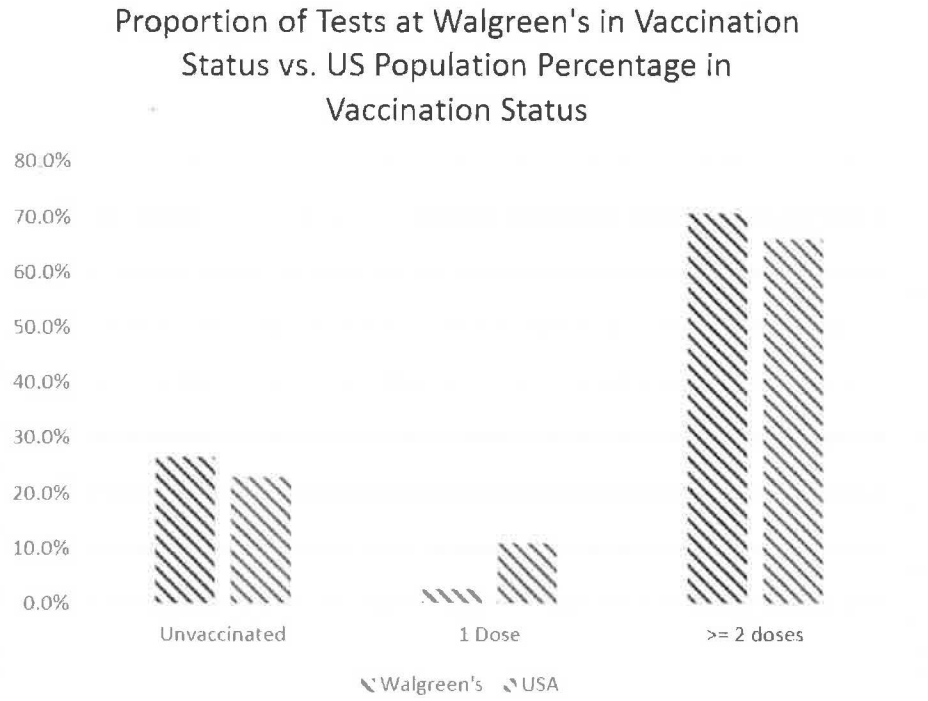
Indeed, we are seeing this effect even more so now across multiple data sets: both national and local.

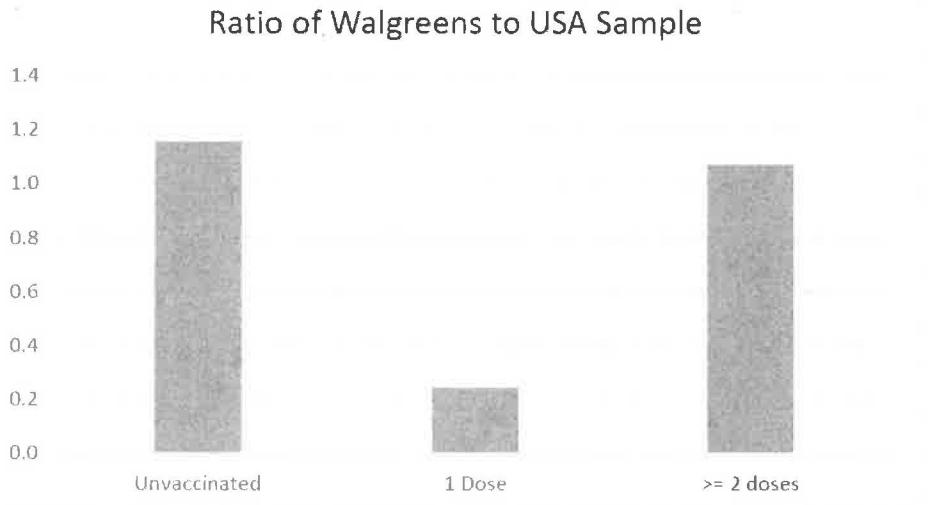
Walgreens is a leading nationwide provider of COVID vaccination and testing provider. They maintain a remarkable COVID dashboard that details test positivity by vaccination status broken down by age cohort.[8] Correcting for vaccination rates and population representation. The data show that vaccinated and boosted individuals are testing positive for COVID-19 at a higher rate than unvaccinated individuals. While there is a chance this reflects the fact that unvaccinated individuals are more likely to have had protection from a prior infection and more likely required to obtain surveillance testing, this does not impact our discussion here as the vast majority of Americans, vaccinated or not, have had a COVID-19 infection (approximately 75% through February 2022 alone).[9]

The Walgreen's data is not excessively sampling vaccinated patients. In fact, the population tested by Walgreens has a small number of single-dose vaccinated than the USA population, with higher

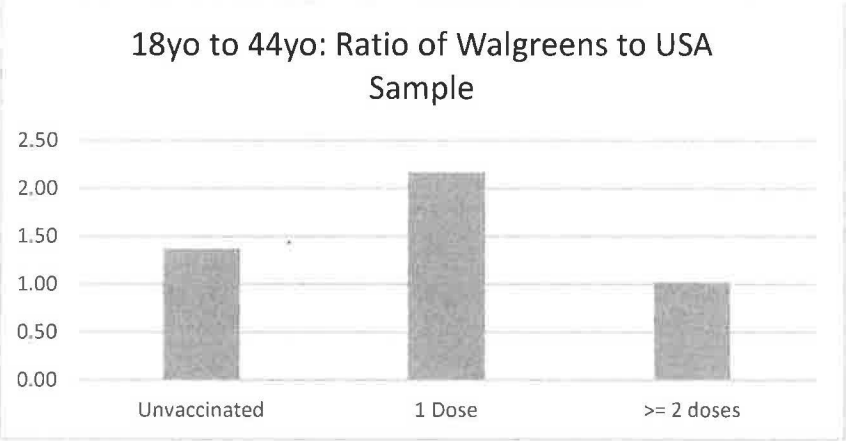
[8] https://www.walgreens.com/businesssolutions/covid-19-index.jsp
[9] https://covid19serohub.nih.gov/

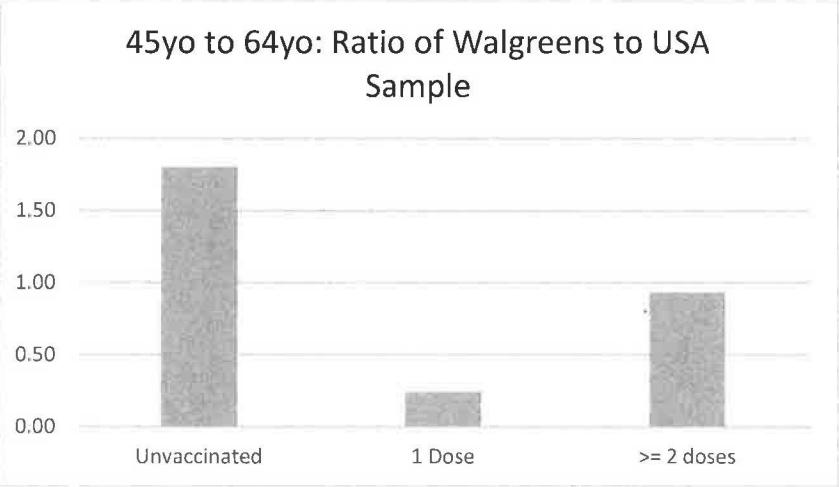
proportions of vaccinated and unvaccinated patients – particularly the unvaccinated.

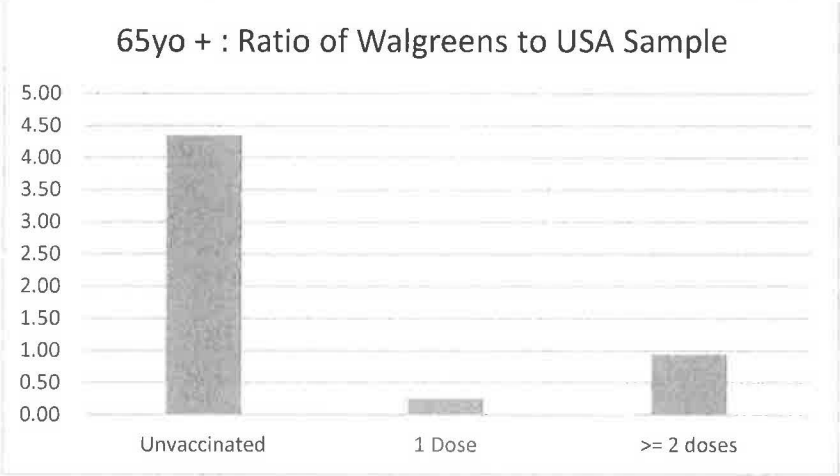




In fact, in the over 18-year-old age cohorts, Walgreen's tests unvaccinated patients at significantly higher rate than their representation in the USA population:

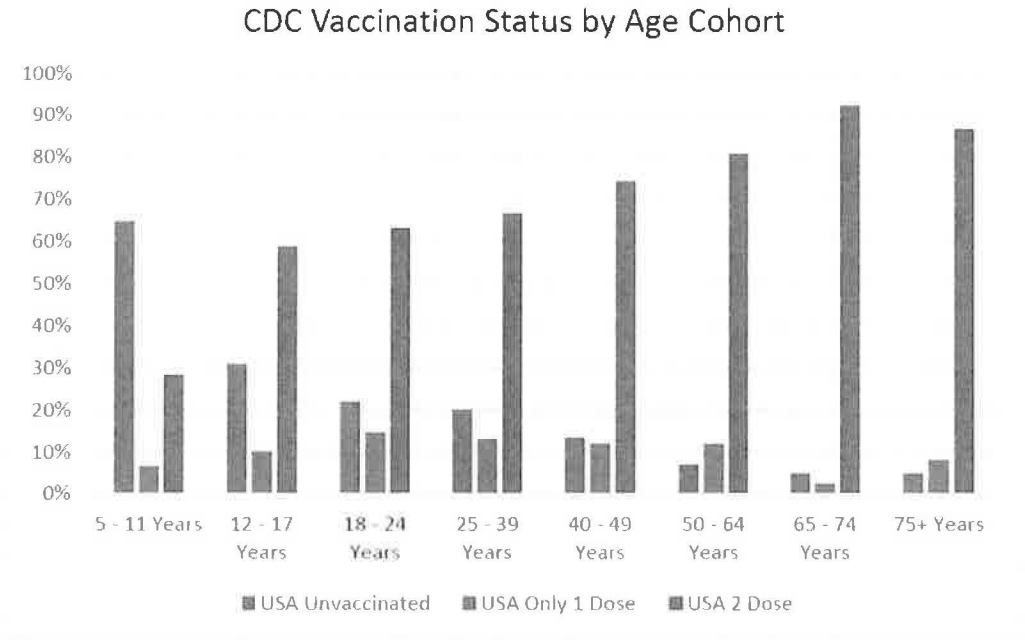




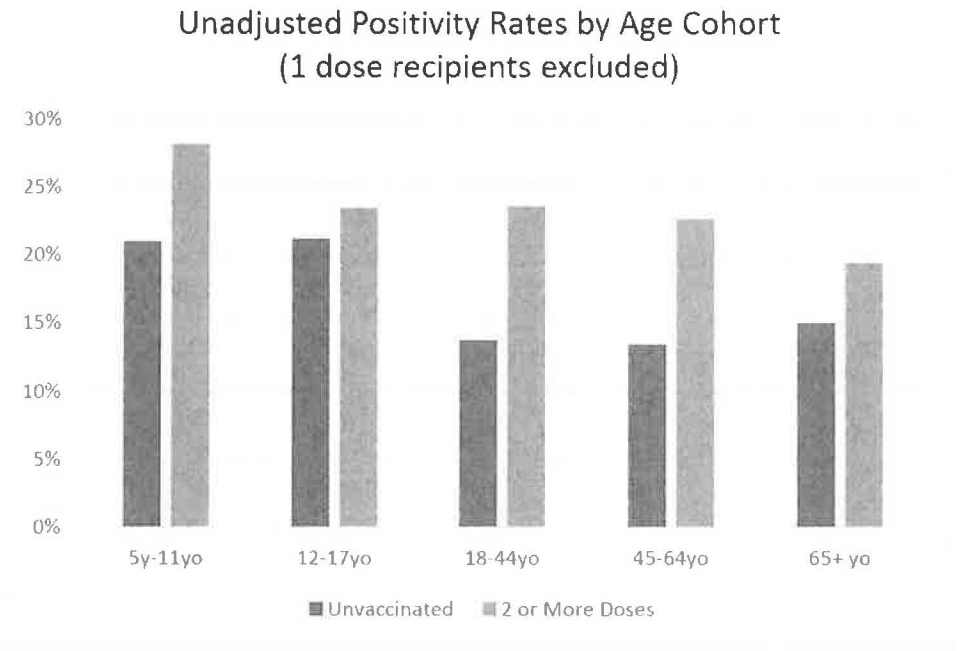


When collecting Walgreens data for a testing week April 28th, 2022, for every age cohort, vaccinated individuals are testing positive at a *higher rate*. It's important to understand that these are rates so there is no "base rate fallacy". In other words, just because vaccinated individuals are a larger percentage of the population, they will not register a higher rate of positivity.

CDC data by dose per age cohort through April 2022:

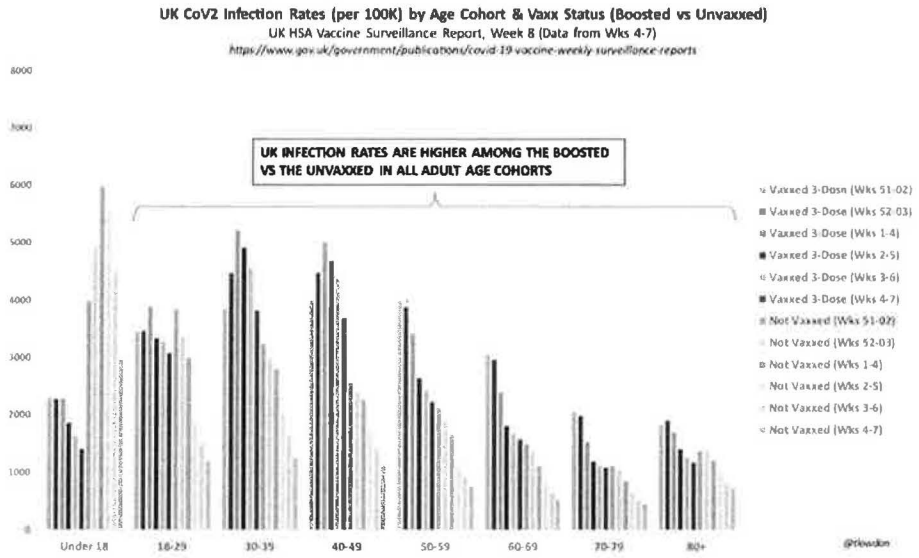


Consolidating fully vaccinated and boosted individuals into a "2 or more doses" category to correspond to the CDC data above, we see the following across all age cohorts from Walgreens:

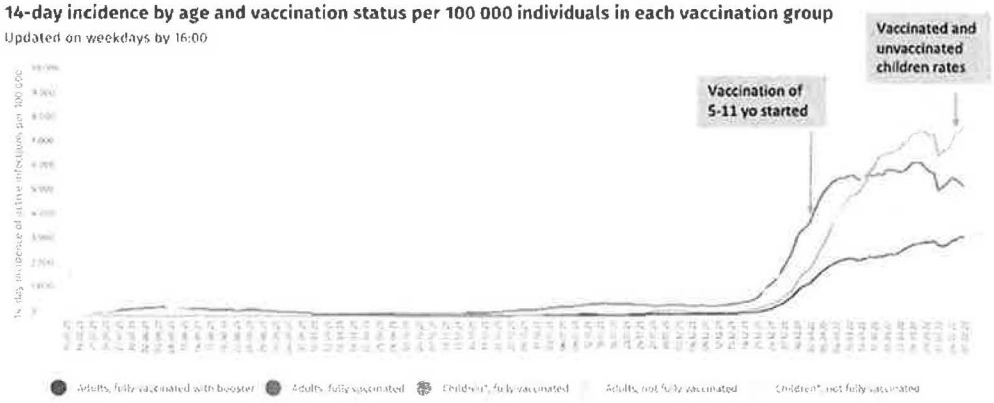


These high positivity rates in vaccinated individuals are duplicated across multiple countries.

The United Kingdom[10]:



Iceland:



[10] https://www.gov.uk/government/publications/covid-19-vaccine-weekly-surveillance-reports

And the high infection rates in vaccinated, and even near universally boosted populations is evident in multiple local data sets such as the University of California campuses.

The University of California at Irvine:[11]

Daily snapshot: 5/27/2022 6:04:04 AM

Positive cases reported yesterday

57

All Students: 53
Students in Campus Housing 36
Students not in Campus Housing 17
Staff and Faculty/Academics: 4

Cumulative positive cases

5,426

All Students: 4,563
Students in Campus Housing: 2,336
Students not in Campus Housing: 2,227
Staff and Faculty/Academics: 863

Total number of people testing positive starting September 5, 2021

Active positive cases

429

All Students: 390
Students in Campus Housing 256
Students not in Campus Housing 134
Staff and Faculty/Academics: 39

Those who are currently recuperating

Cumulative recovered cases

4,997

All Students: 4,173
Students in Campus Housing: 2,080
Students not in Campus Housing: 2,093
Staff and Faculty/Academics: 824

Those cleared to return to normal daily activity

Isolation and quarantine beds available

257

Out of 362 total beds

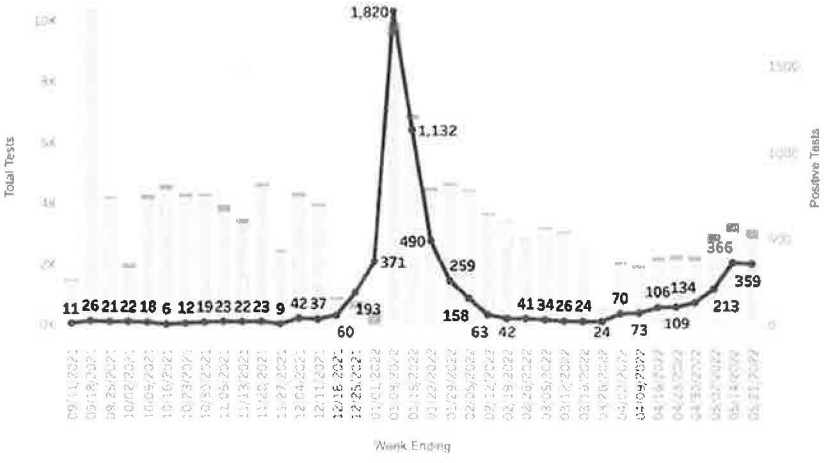
Vaccination and Booster Data

	% Vaccinated	% Boosted*	Total Vaccinated	Total Population
All Students	98%	97%	33,711	34,484
Students in Campus Housing	99%		14,074	14,214
Students not in Campus Housing	97%		19,637	20,270
Staff and Faculty/Academics	95%	99%	6,683	7,007

* % boosted is a subset of total vaccinated who are eligible to be boosted

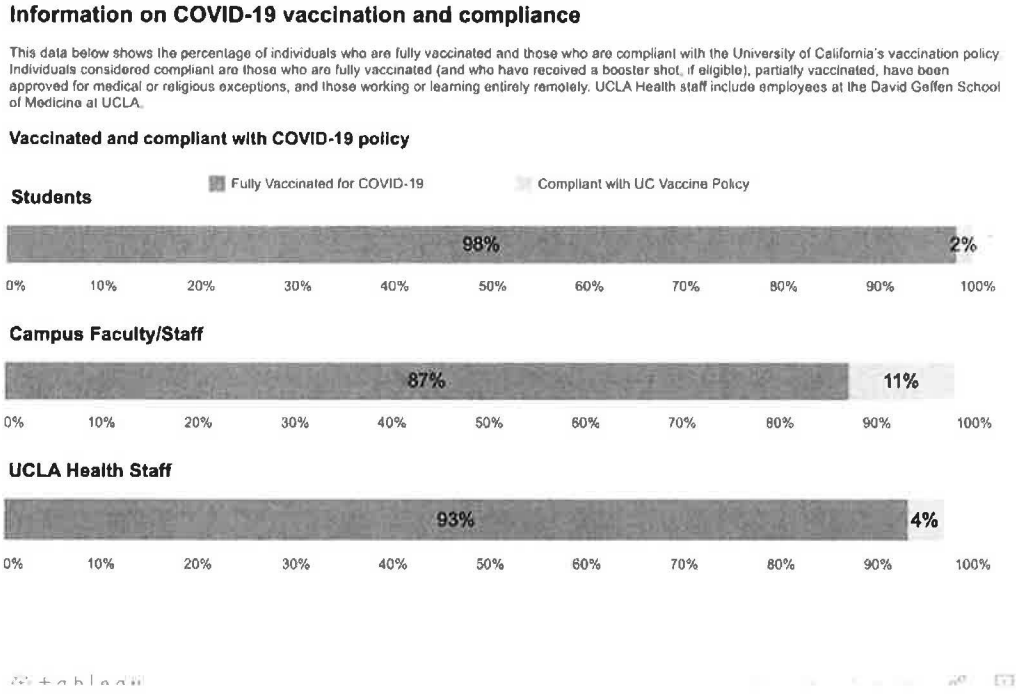
Symptomatic and asymptomatic testing

Testing since September 5, 2021. The following chart combines asymptomatic and symptomatic results.

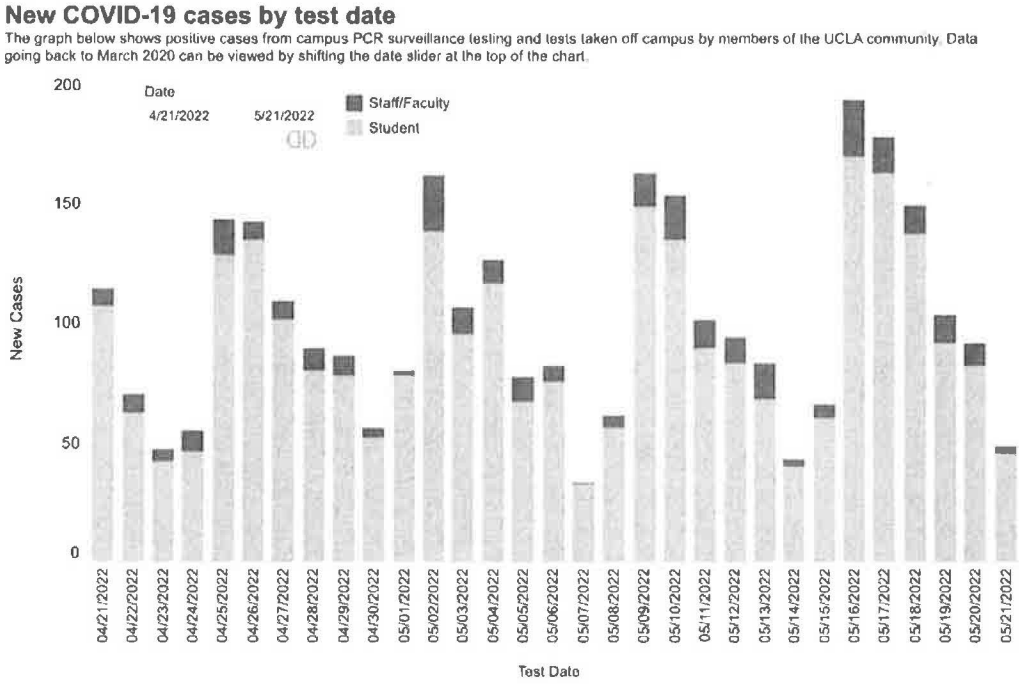


[11] https://uci.edu/coronavirus/dashboard/index.php

University of California at Los Angeles:[12]



[12] https://covid-19.ucla.edu/confirmed-cases-of-covid-19-among-the-ucla-campus-community/



Coming back to Danish research on transmission with the BA.2 Omicron variant (dominant now) versus the BA.1 Omicron variant (dominant through the winter of 2021-22), they noted:[13]

> Both unvaccinated, fully vaccinated and booster-vaccinated individuals had a higher susceptibility for BA.2 compared to BA.1, indicating an inherent increased transmissibility of BA.2 (Table 3). However, the relative increase in susceptibility was significantly greater in vaccinated individuals compared to unvaccinated individuals (appendix Figure 6, which points towards immune evasive properties of the BA.2 conferring an even greater advantage for BA.2 in a highly vaccinated population such as Denmark. Because previous studies of the Omicron VOC has focused on the BA.1 (Pearson et al., 2021; Planas et al., 2021), new studies are needed to further investigate these properties for BA.2.

[13] https://www.medrxiv.org/content/10.1101/2022.01.28.22270044v1

Vaccine mandates for COVID-19 vaccines were an ill-conceived policy more than a year ago. As noted by Dr. Patrick Moore during the original Pfizer FDA review meeting, "FDA did not ask in its guidance and Pfizer has presented no evidence in its data today that the vaccine has any effect on virus carriage or shedding" (page 342 of the transcript).[14]

Having said the above, it is well past time to reconsider our approach to COVID-19 especially as it pertains to COVID-19 vaccine mandates even if one truly believes that *any* reduction in transmission is demonstrable. When considering the susceptibility of the general population to COVID-19 in May of 2022, at least 97% of Americans are no longer immune-naïve to SARS-CoV-2 through either vaccination, infection, or hybrid immunity.[15] As noted by FDA voting member Dr. Paul Offitt, it is clear that neither vaccination or mass testing will stop COVID-19, but both vaccination and prior infection will confer resistance to severe disease.[16] This "herd resistance to severe disease " will not confer iron-clad protection from an "infection" moving forward, but it's

[14] https://www.fda.gov/media/144859/download (page 342)
[15] https://covid19serohub.nih.gov/
[16] https://www.inquirer.com/health/expert-opinions/covid-19-pandemic-immunity-boosters-normal-20220304.html?

main value will be protection from severe disease and there is historical precedent for this belief.[17] By July 13th, 2022, with likely well over 97% of Americans (was 97% through February 18th, 2022) falling into a category of prior vaccination and/or prior infection, as a population, we have achieved as much meaningful population level protection as is possible. Moving forward, every individual, based upon their individual age, metabolic risks, immune status, and personal preferences, will have to decide how best to proceed with future vaccine doses or therapeutics.[18]

Influenza

This brings us full circle to Influenza as the parallels are dramatic. Both are RNA viruses of roughly the same size, both are transmitted by droplets and aerosols, and the impacts of vaccination are quite similar. COVID-19 has followed the path of Influenza: now, as with influenza, cases of COVID-19 will continue to appear, but the number and severity of those infections will be significantly reduced even while neither vaccination or prior infection represents an impenetrable shield to

[17] https://www.eurekalert.org/news-releases/694958
[18] https://www.nature.com/articles/s41574-021-00608-9

subsequent infection.[19,20] In fact, a 2018 study positively correlated amount of virus in exhaled breath with vaccination status thereby suggesting that in the study population, those vaccinated with the Influenza vaccine were spreading more viral particles.[21] It is well established that the benefits of Influenza vaccination extend to the individual receiving the vaccination which is traditionally why Influenza vaccination in health care settings has been recommended and not mandated (until recently at some institutions). Indeed, a 2017 study established that patient benefit from healthcare worker was not established:

> "The impression that unvaccinated HCWs place their patients at great influenza peril is exaggerated. Instead, the HCW-attributable risk and vaccine-preventable fraction both remain unknown and the NNV to achieve patient benefit still requires better understanding. Although current scientific data are inadequate to support the ethical implementation of enforced HCW influenza vaccination, they do not refute approaches to support voluntary vaccination or other more broadly protective practices, such as staying home or masking when acutely ill." [22]

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[19] https://www.eurekalert.org/news-releases/694958

[20] https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(21)00180-4/fulltext

[21] https://www.pnas.org/doi/10.1073/pnas.1716561115

[22] https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0163586

This has led Dr. Michael Osterholm, formerly a member of the Biden Administration's COVID Task Force to state:

> "We have to make public health recommendations based on good science," Osterholm added, "but we do not have the justification to take punitive action against healthcare workers if they don't get vaccinated [for Influenza]." [23]

"Sterilizing Vaccines" and Mandates

When we refer to "sterilizing vaccines", we are referring to vaccines that confer both protection from infection thereby effectively eliminating infection risk as well as providing protection from severe illness. Traditionally, as canonical examples of "sterilizing vaccines", we consider the Measles/Mumps/Rubella (MMR) vaccine as it pertains to Measles and the Hepatitis B vaccine. Measles, like Influenza and SARS-CoV-2 (the virus that causes COVID-19) are respiratory viruses. Measles transmission while through droplets and aerosols, is more droplet mediated than with COVID-19 or Influenza, and yet remains highly contagious. In the case of Measles and Hepatitis B, there is a major component of the infection that is bloodborne (unlike SARS-CoV-2 or

[23] https://www.cidrap.umn.edu/news-perspective/2017/01/health-worker-flu-vaccine-data-insufficient-show-protection-patients

Influenza) such that blood-borne vaccine or infection induced antibodies can perform a pivotal role in preventing infection. But even in the context of Measles and Hepatitis B vaccines, "sterilizing" is a relative term.

Numerous studies have shown that those vaccinated against Measles can develop infections, even as the primary value remains protection from severe illness. In a recent 2018 study of an outbreak in a French Psychiatric ward, 14% of fully vaccinated index cases from a primary unvaccinated case developed Measles. 2 of the cases had 2 Measles vaccinations and one even had vaccination with a prior infection in the preceding 6 years.[24] A less contained outbreak in New York was traced to a vaccinated index case.[25]

All of this said, an outbreak of Measles in the Marshall Islands demonstrated that non-vaccine eligible infants were more likely to be infected as secondary contacts than adults (46% versus 13%).[26] In this outbreak, the largest in the United States or associated area in more than a decade, 41% of cases were reported to have been previously vaccinated.

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[24]https://journals.lww.com/pidj/FullText/2019/09000/Measles_Transmission_in_a_Fully_Vaccinated_Closed.27.aspx

[25] https://academic.oup.com/cid/article/58/9/1205/2895266

[26] https://pubmed.ncbi.nlm.nih.gov/16392073/

Given that Measles vaccine is not recommended under 12 months of age, the biggest lesson of the Marshall Islands outbreak was the susceptibility of vulnerable non-vaccine eligible populations. It is thought that 90% vaccine coverage is required for the prevention of such outbreaks.

In the case of Hepatitis B, transmission is through body fluid contact. Vaccination, or infection, followed by documented threshold antibody levels is highly effective in preventing infection and transmission. Once again, "sterilizing immunity" in this context remains "relative" with documented Hepatitis B cases in previously vaccinated individuals. In one study, roughly 10% of previously vaccinated individuals with no evidence of prior infection had detectable Hepatitis B virus through DNA-testing suggesting evidence of an undetected "breakthrough" infection.[27] Once again, as with protection from a Measles vaccination, the benefit accrued to the vaccinated individual is substantial. In East Asian countries, Hepatitis B is endemic (spreads at baseline through the population). With the advent of universal Hepatitis B vaccination of newborns in Taiwan, the infant mortality rate from

[27] https://journals.lww.com/md-journal/fulltext/2016/12060/hepatitis_b_viremia_in_completely_immunized.92.aspx

hepatitis B dropped by 3-fold and severe hepatitis almost disappeared in older children.[28,29,30]

Summary

While we can establish significant distinctions between "sterilizing vaccines" and vaccines such as the ones for COVID-19 and Influenza, it remains the case that the main benefit of vaccination is accrued to the individual receiving the vaccination. For vaccines such as the COVID-19 and Influenza vaccines where there is minimal prevention of subsequent infection and transmission, it's extremely difficult to supplant individual bodily autonomy particularly at threat of unemployment or violation of one's religious beliefs.

However, for "sterilizing vaccines", even while they do not absolutely prevent subsequent infection, clearly demonstrated reduction in transmission with high community vaccination rates requires more consideration than one's personal autonomy. Specifically, nuance is required when considering populations that are at risk of disease, but are

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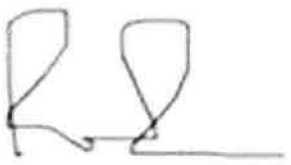
[28] https://pubmed.ncbi.nlm.nih.gov/11562612/
[29] https://pubmed.ncbi.nlm.nih.gov/14752823/
[30] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3630933/

not eligible, either through age or circumstance, to receive a particular "sterilizing vaccine". In these cases, caregivers who do not accept such "sterilizing vaccines" where said vaccination can markedly attenuate transmission when community vaccine coverage is more than 90%, may need to accept special precautions when caring for vulnerable populations. While one might argue that these precautions should be entertained regardless of vaccination status, community vaccination rates for such "sterilizing vaccines" will affect the risk of infection and transmission irrespective of any one individual's vaccination status. These special precautions may include, but are not limited to, use of fit-tested N95 masking, enhanced barrier precautions, and even surveillance testing.

I declare under penalty of perjury, under the laws of the State of Montana, that the foregoing is true and correct.



Ram Duriseti MD, PhD
July 15th, 2022

Ram Duriseti, M.D., Ph.D.
(650) 521-4517
ramduriseti@gmail.com

Educational Background:

Engineering:

•9/01-5/07: Doctoral degree from the Stanford University School of Engineering with a concentration in Decision/Risk Analysis, Machine Learning, and Clinical Decision Support. Coursework included Decision and Risk Analysis, Probability and Statistical Inference, Bayesian Networks, Machine Learning, Computer Science, and Clinical Informatics. Funded through a VA Medical Informatics Fellowship.

- Computing Background: C++, Java, Matlab, C, Ruby On Rails, Javascript and HTML with Ajax, Drools (JBoss Rules Engine), controlled medical terminology deployment (IMO services, SNOMED-CT, RxNorm, and other UMLS resources), Apelon server deployment, LISP, PostGreSQL, MySQL, JBoss application server, UNIX environment, Visual Basic (Excel Modules), Git, Subversion and Mercurial version control

Medical and Undergraduate:

•11/97-11/2001: Residency training in Emergency Medicine at Stanford Medical Center.
•5/96: M.D. with highest honors, University of Michigan Medical School
•6/92: B.S. in Biololgy, and B.A in Political Economy, with distinction Stanford University.

Select Relevant Employment Experience:

11/00 – Present: Clinical Associate Professor, Stanford Emergency Department. Contacts: Dr. Bernard Dannenberg and Dr. Matthew Strehlow. Numbers available upon request.
3/01- Present: Mills Peninsula Emergency Medical Associates shareholder. President and CEO until 6/2017
6/08 – Present: Founder, CEO, and Product Engineer (principle algorithm and product design architect) for ShiftRx, L.L.C. ShiftRx provides the ShiftGen service that provides a cloud based enterprise workforce management tool. Key elements: machine learning algorithms, schedule optimization, workforce management, revenue cycle management with payroll integration, Java, Ruby on Rails, MySQL, SaaS on ec2.
10/08 – Present: Special consultant and subject matter expert to Sutter Health for Epic EHR implementation. Provided technical design for the billing extracts to migrate clinical information into a file sharing framework for billing companies supporting Sutter Emergency Medicine groups. Contacts: Multiple. Numbers available upon request.
4/15 – 3/2017: CEO and subsequently CTO and CMO of LifeQode Inc. which provides the Lifesquare product. Helped craft and secure 4 different patents, with continuations, around the central business processes for the product. Contacts: Larry Leisure and Steve Shulman. Numbers available upon request.
7/09 – 10/09: Technical consultant to Rise Health, Inc.. Contacts: Eric Langshur, Forrest Claypool, and Inder-Jeet Gujral. Numbers available upon request.
1/07 – 9/08: Chief Medical Officer and Director of Medical Informatics for Enfold, Inc. Responsibilities include design and implementation of intelligent medical functionality and a taxonomy engine as well as oversight of medical content driving the system. Implementation

details: Java, Ruby on Rails, Drools, Apelon Server, Oracle 10g Database, MySQL. Contacts: Inder-jeet Gujral, Kimberly Higgins-Mays. Numbers are available upon request.
10/06 – 3/08: Medical Informatics Director Working Group Stanford University Hospitals and Clinics CIS Initiative. Particular emphasis on hand held technology integration into the Epic Initiative and organizing patient encounter level reportable data on clinical documentation events. Contacts: Kevin Tabb, President and CEO Beth Israel Deaconess Medical Center. Contact information is available upon request.
6/05 –12/06: Design and implementation of an attribute matching expert system in Java as a consultant to Wellnet Inc. Implemented in a Java environment with Hibernate DBMS and MySQL. Contacts: Kimberly Higgins-Mays. Number available upon request.

Select Research Experience:
7/11-Present: Design and implementation of a computational model for stochastic stimulation of the cost-effectiveness of various strategies to diagnose pediatric appendicitis (manuscript in progress).
10/05-Present: Design and implementation of an asymmetric cost Support Vector Machine to evaluate a large clinical database on chest pain patients presenting to the University of Pennsylvania Hospital Emergency Department (manuscript in progress).
09/02-9/04: Medical Informatics Fellow, Palo Alto Veteran's Administration Hospital.
04/03-Present: Development of Bayesian decision network for evaluation of the clinical utility of the quantitative Vidas ELISA Ddimer Assay. Published work listed.
02/04-Present: Bayesian decision network implementation modeling reasoning in the clinical domain of chest pain and associated pathology in the Emergency Department.
6/05-3/06: Using portable digital devices to generate a standard electronic medical record that can be downloaded directly to a relational database to facilitate data mining for prospective clinical research.
11/99 – 4/00: Retrospective chart review to examine the incidence of electrolyte and cardiac enzyme abnormalities in patients presenting to the Stanford Emergency Department with Supraventricular Tachycardia.

Select Administrative Experience:
6/09 – Present: CEO and Founder of ShiftRx, LLC
6/09 – Present: Regional Information Services Steering Committee for Sutter Health
6/08 – 6/18: President of CEO of Mills Peninsula Emergency Medical Associates
9/12 – 3/17: Acting CMO and CEO of Lifesquare, Inc.
6/07 – 9/08: Chief Medical Officer and Director of Medical Informatics at Enfold, Inc.
5/05-9/08: Member of Medical Informatics Director Working Group and RFP phase of evaluation for the Epic initiative at Stanford University Hospitals and Clinics
4/05-6/06: Served on the Mills-Peninsula Health Information Management and Medical Records Committee.

Current Volunteer Activities
3/22 – Present: Board of Director of Restore Childhood which is a non-profit focused on research initiatives quantifying risks to children in schools in the 'COVID Era". The goals are both legal and scientific. The scientific goal is to generate novel research and support mitigation measures that are both effective and maintain in person education.

EXHIBIT A

12/21 – Present: Co-author of Urgency of Normal. We are a group of physicians focused on collating and presenting data as it pertains to children and COVID. We help facilitate safe school openings.
Guest Lecturer at the Wharton School of Business (University of Pennsylvania) 2007/2008/2009 for health economics and information technology course

Select Honors and Distinctions:

- Guest Lecturer at the Wharton School of Business (University of Pennsylvania) 2007/2008/2009 for health economics and information technology course
- VA Medical Informatics Fellowship
- Alpha Omega Alpha Medical Honor Society
- Graduation with Distinction from the University of Michigan Medical School (top 5%)
- Recommended for Graduation with Distinction from Stanford University
- National Merit Scholarship Recipient
- Telluride Foundation Fellow

Select Papers and Publications:

- Lowe, T., Brown, I., Duriseti, R. "Emergency Department Access During COVID-19: Dis parities in Utilization by Race/Ethnicity, Insurance, and Income", Western Journal of Emergency Medicine; April, 2021

- Duriseti, R., Brandeau M. "Cost-Effectiveness of Strategies for Diagnosing Pulmonary Embolism Among Emergency Department Patients Presenting with Undifferentiated Symptoms", Annals of Emergency Medicine; October, 2010

- Duriseti, R., Wu, T. "Gastrointestinal introduction and abdominal pain – Pediatric Abdominal Pain in the Emergency Department", A Practical Guide to Pediatric Emergency Medicine, Cambridge University Press, Cambridge, 2010

- Duriseti, R. "Musculoskeletal Trauma: fractures", A Practical Guide to Pediatric Emergency Medicine, Cambridge University Press, Cambridge, 2010

- Duriseti, R. "Using Influence Diagrams in Cost Effectiveness Analysis for Medical Decisions", Optimization in Biology and Medicine, Auerbach Press, New York, 2008

- Duriseti, R. "Non-Bayesian Classification to Obtain High Quality Clinical Decisions", Optimization in Biology and Medicine, Auerbach Press, New York, 2008

- Duriseti, R., Shachter R., Brandeau M. "Implications of a Sequential Decision Model on the Use of Quantitative D-Dimer Assays in the Diagnosis of Pulmonary Embolism", Academic Emergency Medicine; July, 2006

- Duriseti R, VanderVlugt T. Paroxysmal supraventricular tachycardia is not associated with clinically significant coronary ischemia. ACEP Abstracts. ACEP Scientific Assembly 10/2001

EXHIBIT A

•VanderVlugt T., Duriseti R. Electrolyte findings in patients with paroxysmal supraventricular tachycardia. ACEP Abstracts. ACEP Scientific Assembly 10/2001

•Contributing Editor for Trauma Reports for the topic, "Trauma in Pregnancy"; published 2/2001

•Duriseti R. Cost Effective Management of Common Infections in the Emergency Department. Resident Reporter. Wyeth Ayerst Resident Scholars Program. March, 2000

Select Professional Lectures:

- Commonly Encountered Statistical Concepts in the Emergency Medicine Literature
- Medical Decision Making, Clinical Information Systems, and Cost Control: Complexity Collides with Uncertainty

Previous Expert Witness Testimony

- *Elijah Brown, et al. v. Mills-Peninsula, et al.*, No. CIV536321 (Cal. Super. Ct. Cty of San Mateo 2015)
- *Julia Sullivan v. The Superior Court of Santa Clara*, No. 18FL001837 (Cal. Super. Ct. Cty of Santa Clara 2018)
- *UNIFYSCC, et al. v. Sara H. Cody, et al.*, No. 22-cv-01019-BLF (N.D. Cal. 2022)
- *Vincent Tsai, et al. v. County of Los Angeles*, No. 21STCV36298 (Cal. Super. Ct. Los Angeles Cty 2021)
- *Jennifer Guilfoyle et al. v. Austin Beutner et al.*, No. 2:2021-cv-05009-VAP (C.D. Cal. 2021)

EXHIBIT A